

## REMARKS

The Office Action mailed on November 12, 2008 has been received and its contents carefully noted. From the Summary page, claims 1-6 were pending and indicated as rejected. Acknowledgment has been made of Applicant's Claim for Priority. Further, the Information Disclosure Statements filed March 22, 2007 and May 22, 2006 both have been considered.

By this response, claims 1-6 have been amended. Claim 1, as amended, now recites transitional phrases to provide further clarification for the claimed process steps. As to claims 2-6, clarifying amendments have been made to recite antecedent basis. No statutory new matter has been added. All claim amendments are supported by the original disclosure.

Further, Applicant respectfully submits a 3-month Extension of Time with the requisite fee with the response.

### *35 U.S.C. § 112, second paragraph*

Claim 2 stands rejected as being indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention. It appears that the Examiner has required amending claim 2 as purportedly being inconsistent with claim 1's recitation of consecutive process steps.

Applicant respectfully traverses the rejection and submits that claim 2 is not indefinite in view of claim 1. That is, the consecutive steps recited in claim 1 are not required to be carried out in the same vessel. The steps of freezing or solidifying can be carried out in a different vessel. In support, Applicant cites to their disclosure as provided in PG Publication US 2007/0128098. Specifically, para. [0040] discloses, "The final suspension obtained of the solid (material) contained therein according to the invention can now be further processed in the same vessel, *or* transferred into another vessel for further processing". [Emphasis Added] Therefore, the claimed features of "process steps are carried out at least partly in parallel", is appropriate. Since Applicant has met his burden of proof in view of the rejection as to claim 2, withdrawal and reconsideration of the rejection are courteously solicited.

***Claim Rejections under 35 U.S.C. § 102(b)***

Claim 1 stands rejected under 35 U.S.C. § 102 (b) as being anticipated by Chopin (U.S. 6,090,743). The rejection as to claim 1 is respectfully traversed.

Claim 1 requires a process for preparing inorganic materials. A salt solution containing at least one substance is introduced into a vessel. Optionally, at least one solid is introduced and mixed therewith. In addition, at least one further salt solution containing at least one substance is introduced. By so doing, a resulting inorganic substance is precipitated out because of its lower solubility product. At least one further substance remains in the solution. Optionally, at least one further salt solution containing at least one substance is added, or a further solvent, in order to form a suspension,

Thereafter, the suspension is frozen or solidified by cooling such that a uniform distribution of solid and salt solution is retained in the suspension. The sedimentation of solid also is prevented.

Next, the solvent is sublimed by application of a vacuum. The suspension is then dried. Optionally, the solid is heat treated.

The claimed process identifies the solid obtained or the material obtained in respect of at least one of its morphology, size, composition, and properties. Optionally, the process is repeated in order to prepare and identify a plurality of material samples in the form of a library.

Applicant respectfully submits that all of the above-mentioned claim features are neither taught nor suggested by Chopin. Therefore, claim 1 patentably distinguishes thereover.

A fair reading of Chopin discloses a precipitated salt solution wherein the precipitate is separated by conventional techniques from the mixture. See col. 3, ll. 60-64. Thereafter, the precipitate is recovered by spraying or freeze drying. See col. 3, ll. 65-67.

Applicant urges that Chopin's silence as to sedimentation does not suggest to one of ordinary skill in the art that sedimentation is prevented. In support of Applicant's position,

Chopin's disclosure to separate the precipitate from the reaction mixture expressly suggests that sedimentation is desirable in order to facilitate separation of the precipitate from the reaction mixture. Chopin, therefore, teaches away from Applicant's invention requiring the prevention of sedimentation. Thus, claim 1 patentably distinguishes thereover.

In addition, Chopin fails to disclose Applicant's claimed freezing process. By contrast with Chopin, Applicant's process requires dissolved salts and precipitate to remain in the reaction mixture. Thereafter, the reaction mixture is freeze-dried. On the other hand, Chopin's freeze drying process is only disclosed with respect to precipitate recovery. Since Chopin fails to teach or suggest freeze drying of the reaction mixture, claim 1 further patentably distinguishes thereover.

Also, given Chopin's failure to disclose Applicant's freezing process, the claimed recitation of, "*a uniform distribution of solid and salt solution is retained in the suspension*" also is neither taught nor disclosed. In view of the instant specification, the claimed process steps affect the physical nature of the solids such as size and BET surface area. See para. [0049]. Therefore, claim 1, further patentably distinguishes thereover. In view of the foregoing, Applicant courteously solicits withdrawal and reconsideration of the rejection as to claim 1.

***Claim Rejections under 35 U.S.C. § 103(a)***

I. Claims 2, 4 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chopin in view of Allison (US 6,723,886). The rejection as to claims 2, 4 and 6 is respectfully traversed.

The Office Action admits that Chopin fails to disclose two vessels in parallel. Allison was introduced as purportedly teaching reaction vessels running in parallel surrounded by a cooling medium per Figures 7 and 8.

A fair reading of Allison suggests that the invention relates to converting a synthesis gas to an alcohol. Therefore, Allison and Chopin, *supra*, cannot be deemed analogous art. In addition, Allison fails to remedy the deficiencies of Chopin with respect to claim 1 (i.e., freezing a salt solution and a precipitate as a whole such that a uniform distribution of solids and salt solution is retained). Accordingly, Applicant advance arguments presented for claim 1, *supra*. Thus, the combination of Chopin and Allison would not have rendered claims 2, 4 and 6 *prima facie* obvious to one of ordinary skill in the art. Accordingly, claims 2, 4 and 6 patentably distinguish thereover. Withdrawal and reconsideration are earnestly solicited by Applicant.

**II.** Claims 2, 3 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chopin in view of Allison and Hoke (US 2003/0166466). The rejection as to claims 2, 3 and 5 is respectfully traversed.

Hoke is non-analogous with Chopin, the primary reference, because there is no indication of freezing a reaction mixture of a salt solution and a precipitate in Hoke. In addition, Hoke fails to remedy the deficiencies of Hoke and Allison. Therefore, Applicant advances arguments made for claim 1, *supra*. Thus, the combination of Chopin and Allison would not have rendered claims 2, 4 and 5 *prima facie* obvious to one of ordinary skill in the art. Accordingly, claims 2, 4 and 5 patentably distinguish thereover. Withdrawal and reconsideration are earnestly solicited by Applicant.

### CONCLUSION

All of the stated grounds of rejections have been properly traversed, accommodated, or rendered moot. Therefore it is respectfully requested that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for all allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. 1.136(a), and any fees required therefore are hereby authorized to be charged to **Deposit Account No. 02-4300, Attorney Docket No. 032301.458.**

Respectfully submitted,  
SMITH, GAMBRELL & RUSSELL, LLP

By: TB Patel  
Tayan B. Patel, Reg. 58,402  
for Robert G. Weilacher, Reg. No. 20,531  
Suite 3100, Promenade II  
1230 Peachtree Street, N.E.  
Atlanta, Georgia 30309-3592  
Telephone: (404): 815-3593  
Facsimile: (404): 685-6893

Date: April 28, 2009

SGRDC\334923.1